



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: GE90-76B BYPASS RATIO: 8.5
 UNIQUE ID NUMBER: 9GE124 PRESSURE RATIO (π_{00}): 35.5
 COMBUSTOR: PEC
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 363.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	5.6	48.6	60.6	2.0
AS % OF ORIGINAL LIMIT	28.5	41.2	54.6	12.0
AS % OF CAEP/2 LIMIT (NO _x)			68.2	
AS % OF CAEP/4 LIMIT (NO _x)			77.7	
AS % OF CAEP/6 LIMIT (NO _x)			86.6	
AS % OF CAEP/8 LIMIT (NO _x)			99.1	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.796	0.03	0.31	40.25	0.9
CLIMB OUT	85	2.2	2.281	0.03	0.32	32.43	0.8
APPROACH	30	4.0	0.738	0.07	2.77	13.76	1.4
IDLE	7	26.0	0.258	3.21	34.12	5.10	1.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			999	1318	14371	18984	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				3.6	39.6	52.3	1.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)				0.3	1.1	0.7	0.8
RANGE (D _p /F ₀₀ in g/kN, or SN)				3.43-3.98	38.85-40.77	51.52-52.95	0.82-2.4

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	98.4-98.7
TEMPERATURE (K)	277.2-281.3
ABS HUMIDITY (kg/kg)	0.0015-0.0043

FUEL

SPEC	Jet A-1
H/C	
AROM (%)	15-16

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: General Electric Peebles Test Operation
 TEST LOCATION: Site 6A
 TEST DATES: 30/11/2007-08/12/2007

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

REMARKS

- GE Aviation Report R2007AE851
- Engine serial number 900-505/1
- Turbomachinery incorporating 3D aero
- Performance Enhanced Combustor (PEC)
- Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
- NO_x levels in accordance with Part III, Chapter 2, 2.3.2 d) (CAEP/6)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)